

GenCore version 5.1.4.p5.4578  
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OM protein - protein search, using sw model

Run on: March 14, 2003, 09:24:14 ; Search time 15.7075 Seconds  
(without alignments)  
1247.532 Million cell updates/sec

Title: US-09-836-077-3  
Perfect score: 3615  
Sequence: 1 MTPTTPGRAPASAPRARVPG.....LAASIMLVLTITGLLVH 666

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Archived: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents\_Aa:\*

- 1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*
- 2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*
- 3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*
- 4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*
- 5: /cgn2\_6/ptodata/2/1aa/PCTUS.COMB.pep:\*
- 6: /cgn2\_6/ptodata/2/1aa/Backfilest1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3615	100.0	666	US-09-240-410-2	Sequence 2, Appl
2	3443	95.2	634	US-09-041-236-2	Sequence 2, Appl
3	1345.5	37.2	606	US-09-041-236-4	Sequence 4, Appl
4	1029	28.5	215	US-09-240-410-4	Sequence 4, Appl
5	654.5	18.1	771	US-08-121-713D-54	Sequence 54, Appl
6	654.5	18.1	771	US-08-835-268-54	Sequence 54, Appl
7	654.5	18.1	771	US-09-060-692-54	Sequence 54, Appl
8	654.5	18.1	771	US-08-833-391-54	Sequence 54, Appl
9	654.5	18.1	771	US-09-060-610-54	Sequence 54, Appl
10	654.5	18.1	771	PCT-US94-10151A-54	Sequence 54, Appl
11	566	15.7	775	US-09-308-179B-1	Sequence 1, Appl
12	543	15.0	477	US-08-136-922-2	Sequence 2, Appl
13	449	12.4	730	US-08-121-713D-58	Sequence 58, Appl
14	449	12.4	730	US-08-835-268-58	Sequence 58, Appl
15	449	12.4	730	US-09-060-692-58	Sequence 58, Appl
16	449	12.4	730	US-08-833-391-58	Sequence 58, Appl
17	449	12.4	730	US-09-060-610-58	Sequence 58, Appl
18	449	12.4	730	PCT-US94-10151A-58	Sequence 58, Appl
19	408	11.3	712	US-08-121-713D-64	Sequence 64, Appl
20	408	11.3	712	US-08-835-268-64	Sequence 64, Appl
21	408	11.3	712	US-09-060-692-64	Sequence 64, Appl
22	408	11.3	712	US-08-833-391-64	Sequence 64, Appl
23	408	11.3	712	US-09-060-610-64	Sequence 64, Appl
24	408	11.3	712	PCT-US94-10151A-64	Sequence 64, Appl
25	407	11.3	724	US-08-121-713D-62	Sequence 62, Appl
26	407	11.3	724	US-08-835-268-62	Sequence 62, Appl
27	407	11.3	724	US-09-060-692-62	Sequence 62, Appl

28	407	11.3	724	US-08-833-391-62	Sequence 62, Appl
29	407	11.3	724	US-09-060-610-62	Sequence 62, Appl
30	407	11.3	724	PCT-US94-10151A-62	Sequence 62, Appl
31	399	11.0	650	US-08-121-713D-60	Sequence 60, Appl
32	399	11.0	650	US-08-835-268-60	Sequence 60, Appl
33	399	11.0	650	US-09-060-692-60	Sequence 60, Appl
34	399	11.0	650	US-08-833-391-60	Sequence 60, Appl
35	399	11.0	650	US-09-060-610-60	Sequence 60, Appl
36	399	11.0	650	PCT-US94-10151A-60	Sequence 60, Appl
37	373	10.3	660	US-09-181-706-8	Sequence 8, Appl
38	373	10.3	660	US-09-458-791-8	Sequence 8, Appl
39	373	10.3	660	US-09-459-066-8	Sequence 8, Appl
40	364	10.1	441	US-08-121-713D-56	Sequence 56, Appl
41	364	10.1	441	US-08-835-268-56	Sequence 56, Appl
42	364	10.1	441	US-09-060-692-56	Sequence 56, Appl
43	364	10.1	441	US-08-833-391-56	Sequence 56, Appl
44	364	10.1	441	US-09-060-610-56	Sequence 56, Appl
45	364	10.1	441	PCT-US94-10151A-56	Sequence 56, Appl

## ALIGNMENTS

RESULT 1  
US-09-240-410-2  
Sequence 2, Application US/09240410  
Patent No. 6197544  
GENERAL INFORMATION:  
APPLICANT: MICHALOVICH, DAVID  
APPLICANT: HAYES, PHILIP DAVID  
TITLE OF INVENTION: NOVEL COMPOUNDS  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESS: Ratner & Prestia  
STREET: P.O. Box 980  
CITY: Valley Forge  
STATE: PA  
COUNTRY: USA  
ZIP: 19482  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/240,410  
FILING DATE: 27-JAN-1999  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: UK APPLICATION NO. TO BE ASSIGNED  
FILING DATE: 20-JAN-1999  
APPLICATION NUMBER: EP APPLICATION NO. 98300694.1  
FILING DATE: 30-JAN-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: Prestia, Paul F  
REGISTRATION NUMBER: 23,031  
REFERENCE/DOCKET NUMBER: GP-30039  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 610-407-0700  
TELEFAX: 610-407-0700  
TELEX: 846169  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 666 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-240-410-2  
Query Match 100.0%; Score 3615; DB 4; Length 666;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 666; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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OY 1 MTPPPGAAAPAPAPAPVGPAPAGLPLRLRLLLLLMAAASAOQHLSRGPRIAPVWGK 60
Db 1 MTPPPGAAAPAPAPAPVGPAPAGLPLRLRLLLLLMAAASAOQHLSRGPRIAPVWGK 60
OY 61 HVGQORVPGGOTEPHTVLFHEPGSSSVWVGSGKAYLFPFPGKNAVTVTVNGSTKSGC 120
Db 61 HVGQORVPGGOTEPHTVLFHEPGSSSVWVGSGKAYLFPFPGKNAVTVTVNGSTKSGC 120
OY 121 LDKRCENYITLLERSEGLLACGTNARHPSCMNLVNGTVLPGEMRGVAPSPDENSLV 180
Db 121 LDKRCENYITLLERSEGLLACGTNARHPSCMNLVNGTVLPGEMRGVAPSPDENSLV 180
OY 181 LFEQDEVYSTIRKOEYNGKIPREFRIRIGESELVYSDTVQMNQOFIKATIVHODQAVDDKI 240
Db 181 LFEQDEVYSTIRKOEYNGKIPREFRIRIGESELVYSDTVQMNQOFIKATIVHODQAVDDKI 240
OY 241 YFFPEDNDPKKPEAPLNVSRVAQLCRGDQGGESSLSVSKMTEFLKMLVCSDAATNKNF 300
Db 241 YFFPEDNDPKKPEAPLNVSRVAQLCRGDQGGESSLSVSKMTEFLKMLVCSDAATNKNF 300
OY 301 NRLQDVFLLPSPSGQWRDTRVYGVSNPMNYSAVCVYSLGIDIKYFRTSLKGYHSSLPN 360
Db 301 NRLQDVFLLPSPSGQWRDTRVYGVSNPMNYSAVCVYSLGIDIKYFRTSLKGYHSSLPN 360
OY 361 PRPGKCLPDQDPIPTETQVADRHPEVAQRPVPGPLKTLPLFHSKYHYOKVAVHMQASH 420
Db 361 PRPGKCLPDQDPIPTETQVADRHPEVAQRPVPGPLKTLPLFHSKYHYOKVAVHMQASH 420
OY 421 GETFVVLTLTDRGTINHYVPEPGEHSAFNIEMIOFRRRAAIIQOTMSLDERKLVYS 480
Db 421 GETFVVLTLTDRGTINHYVPEPGEHSAFNIEMIOFRRRAAIIQOTMSLDERKLVYS 480
OY 481 SOMEVSOVPLDCEVYGGGCHGCLMSRDPYCGMDQGRCSISYSRSRYLQSIINPAEPHKE 540
Db 481 SOMEVSOVPLDCEVYGGGCHGCLMSRDPYCGMDQGRCSISYSRSRYLQSIINPAEPHKE 540
OY 541 CPNRPDAPLQKYSVLANSRYLLSCPMESRATYSMRKEVNEOSCEPQHOSPCILFI 600
Db 541 CPNRPDAPLQKYSVLANSRYLLSCPMESRATYSMRKEVNEOSCEPQHOSPCILFI 600
OY 601 ENLAAOQGHFCEAOESYFREAQHWOLLPEDGIMAEHLGHACALASLMLGLVPLTL 660
Db 601 ENLAAOQGHFCEAOESYFREAQHWOLLPEDGIMAEHLGHACALASLMLGLVPLTL 660
OY 661 LGLLVH 666
Db 661 LGLLVH 666

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FILING DATE: March 11, 1998
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: OSMAN, RICHARD A
REGISTRATION NUMBER: 36,627
REFERENCE/DOCKET NUMBER: EXL98-001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 343-4341
TELEFAX: (650) 343-4342
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 634 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
us-09-041-236-2

Query Match 95.2%; Score 3443; DB 4; Length 634;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 634; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 33 LLLLMAAASAOQHLSRGPRIAPVWGKHYGQDRVDFGOTEPHTVLFHEPGSSVWVGGR 92
Db 1 LLLLMAAASAOQHLSRGPRIAPVWGKHYGQDRVDFGOTEPHTVLFHEPGSSVWVGGR 92
OY 93 GKVVLFDEPECKNASVRIVNIGSTKSCIDKRCENYITLLERSEGLLACGTNARHPSC 152
Db 61 GKVVLFDEPECKNASVRIVNIGSTKSCIDKRCENYITLLERSEGLLACGTNARHPSC 152
OY 153 WNLVNGTVAPVPGEMGVAPFSPDENSLVFEQDEVYSTIRKOEYNGKIPREFRIRIGESEL 212
Db 121 WNLVNGTVAPVPGEMGVAPFSPDENSLVFEQDEVYSTIRKOEYNGKIPREFRIRIGESEL 212
OY 213 YTSIDTVMNQOFIKATIVHODQAVDDKIYFFREDNDPKKPEAPLNVSRVAQLCRGDQGG 272
Db 181 YTSIDTVMNQOFIKATIVHODQAVDDKIYFFREDNDPKKPEAPLNVSRVAQLCRGDQGG 272
OY 273 ESSLSVSKMNTFLKMLVCSDAATNKNFNRLQDVFLLPDPSGQWRDTRVYGVSNPMNYS 332
Db 241 ESSLSVSKMNTFLKMLVCSDAATNKNFNRLQDVFLLPDPSGQWRDTRVYGVSNPMNYS 332
OY 333 AAVCVYSLGIDIKYFRTSLKGYHSSLPMRPGKCLPDQDPIPTETQVADRHPEVAQRYE 392
Db 301 AAVCVYSLGIDIKYFRTSLKGYHSSLPMRPGKCLPDQDPIPTETQVADRHPEVAQRYE 392
OY 393 PMGRLKTLPLFHSKYHYOKVAVHMQASHGETFHVLYLTTDRGTINHYVPEPGEHSAFNI 452
Db 361 PMGRLKTLPLFHSKYHYOKVAVHMQASHGETFHVLYLTTDRGTINHYVPEPGEHSAFNI 452
OY 453 IMEIOFRRRAAIIQOTMSLDERKLVYSOWEVSQVPLDCEVYGGGCHGCLMSRDPYCG 512
Db 421 IMEIOFRRRAAIIQOTMSLDERKLVYSOWEVSQVPLDCEVYGGGCHGCLMSRDPYCG 512
OY 513 WDOGRCSISYSERSVLSINPAEPHKECPNRPKAPLQKYSVLANSRYLLSCPMESRH 572
Db 481 WDOGRCSISYSERSVLSINPAEPHKECPNRPKAPLQKYSVLANSRYLLSCPMESRH 572
OY 573 ATYSMRKEVNEOSCEPQHOSPCILFIENLAAOQGHFCEAOESYFREAQHWOLLP 632
Db 541 ATYSMRKEVNEOSCEPQHOSPCILFIENLAAOQGHFCEAOESYFREAQHWOLLP 632
OY 633 DGIMAEHLGHACALASLMLGLVPLTLGLLVH 666
Db 601 DGIMAEHLGHACALASLMLGLVPLTLGLLVH 666

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RESULT 3
us-09-041-236-4
Sequence 4, Application US/09041236
Patent No. 6225285
GENERAL INFORMATION:
APPLICANT: Luo, Yuling

```

TITLE OF INVENTION: Semaphorin K1  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESS: SCIENCE & TECHNOLOGY LAW GROUP  
STREET: 75 DENISE DRIVE  
CITY: HILLSBOROUGH  
STATE: CALIFORNIA  
COUNTRY: USA  
ZIP: 94010  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/041.236  
FILING DATE: March 11, 1998  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: OSMAN, RICHARD A  
REGISTRATION NUMBER: 36,627  
REFERENCE/DOCKET NUMBER: EXEL98-001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (650) 343-4341  
TELEFAX: (650) 343-4342  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 606 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-041-236-4

Query Match 37.2%; Score 1345.5; DB 4; Length 606;  
Best Local Similarity 45.9%; Pred. No. 8.2e-127; Indels 11; Gaps 6;  
Matches 274; Conservative 85; Mismatches 227;

QY 27 LPLRLLLLLMAAASAGHLRSRPFVAVKGVGDYVGGQTEPHVLFHEBSSS 86  
D 4 LCVSIRLLMIL-SAITAAKSRFIDKPRILVNLTDGFGQHRF-FGQEPHTVLFHLSNSD 61  
QY 87 VWVGRGKAVYLFDFEGKNAASRYTNIGSTKSCLDKRCENYITLLERSGGLACGTN 146  
D 62 VYVGNNYTYLDFEFAHSSNAATALINITNTHTRLSSTCENFTLLHNOTGLLACGTN 121  
D 147 ARHPCSMNLVNGTVYPLGEMRGVAPSPENDSVLFEDEGVSTIRKOEYNKIPERRI 206  
122 SOKPSCMLNLTTFGLCPKGLAPFSGSCNVLFDONDYSTINLKYSLSGSHKFRRI 181  
QY 207 RGESELYTSDTVWQNPQFIKATIVHODQAYDDKIYFFREDNDPKNPEAPLVNSRYAOLC 266  
D 182 AGQVELYTSDFAMHRPQFQATAVHKNSYDCKIYFFQENSHSPKOPPHVPRGQVC 241  
QY 267 RGDGGSSELSYKWNTEFLKAMLVCSDAATNKENRDLQVLLPDPGQMDTRFYGVFS 326  
D 242 SSDGGSSELSYKWNTEFLKARLACVDYDTGRITNELQDIFQWAPENSMEETLLYGLFL 301  
QY 327 NPWNSAVCVSLGIDIDKVFRTSSLYGHSSLPNRPQCKLPDQOPIPETEVOVADRPE 386  
D 302 SPWNSAVCVSLGIDIDKVFRTSSLYGHSSLPNRPQCKMHQVPEPEVOVADRPE 361  
QY 387 VAORVEPMPLKTPLEHSKYHQAIVHMQASHGETF--HYLYLTPDRTGTHKVEPE 444  
D 362 VADPYQKNNMFPILQSKYITKLYRYVE--YGVFMATIFLYLTIKGTHIHYRYVD 419  
QY 445 QHSAFANIMELQPRRAAIQTMGLDERKLYVSSQMEVSQVPLDJCEVYGGCGHGL 504  
D 420 SNSTALVILEINPQKPAPIQNIILDMTNLKYVNSEVESEVPLDLCVYGNDCFCSCF 479  
QY 505 MSRDYCGMDGRCSTISSESVLOSINPAEP--HKQEPNKPAPKAPLOKYSLAPNSRY 562  
D 480 MSRDPLCTWYNNTC--SFQKRVSVETGTPANRTLSEMGDHYAPTVYKHOVSIPLLNS 536

QY 563 YLSCPMESRHATYVSMRHKENVEQSCPEGHQSPNCLIFIENTLAQOYGHVCEAOGS 619  
D 537 YLSCAVSNHADYFWTKDSFTEKRCHVYKHKNDICILLINSTANTNGHVCNMKDS 593

*Semaphorin*

RESULT 4  
US-09-240-410-4  
Sequence 4, Application US/09240410  
Patent No. 6197544  
GENERAL INFORMATION:  
APPLICANT: MICHALOVICH, DAVID  
APPLICANT: HAYES, PHILIP DAVID  
TITLE OF INVENTION: NOVEL COMPOUNDS  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESS: Ratner & Prestia  
STREET: P.O. Box 980  
CITY: Valley Forge  
STATE: PA  
COUNTRY: USA  
ZIP: 19482  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/240.410  
FILING DATE: 27-JAN-1999  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: UK APPLICATION NO. TO BE ASSIGNED  
FILING DATE: 20-JAN-1999  
APPLICATION NUMBER: EP APPLICATION NO. 98300694.1  
FILING DATE: 30-JAN-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: Prestia, Paul F  
REGISTRATION NUMBER: 23,031  
REFERENCE/DOCKET NUMBER: GP-30039  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 610-407-0700  
TELEFAX: 610-407-0700  
TELEX: 846169  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 215 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-240-410-4

Query Match 28.5%; Score 1029; DB 4; Length 215;  
Best Local Similarity 91.6%; Pred. No. 1.3e-95;  
Matches 197; Conservative 2; Mismatches 14; Indels 2; Gaps 2;

QY 63 GODRVDFGQTEPHVLFHPSGSSVWVGKGVYLLDFPEEGKNAASRYTNIGSTKSCLD 122  
D 1 GODRVDFGQTEPHVLFHPSGSSVWVGKGVYLLDFPEEGKNAASRYTNIGSTKSCLD 60  
QY 123 KRDCENYITLLRRSEGLACGTNARHPSCMWLVNCTVPLGEMRGVAPSPDEN-SLYL 181  
D 61 KRDCENYITLLRRSEGLACGTNARHPSCMWLVNLMCHLGEESGVAFPSPDENVPWC 120  
QY 182 FEGDEYVSTIR-QEYNGKIPRRIRGESELYTSDTVWQNPQFIKATIVHODQAYDDXI 240  
D 121 FEGDEYVSTIRKARVNMEDPREFRRIRGESELYTSDTVWQNPQFIKATIVHODQAYDDXI 180  
QY 241 YFFREDNDPKNPEAPLVNSRYAOLCRDGGGESS 275  
D 181 YFFREDNDPKNPEAPLVNSRYAOLCRDGGGESS 215

RESULT 5  
US-08-121-713D-54  
Sequence 54, Application US/08121713D  
Patent No. 5639856  
GENERAL INFORMATION:  
APPLICANT: Goodman, Corey S.  
APPLICANT: Kolodkin, Alex L.  
APPLICANT: Mathes, David  
APPLICANT: Bentley, David R.  
APPLICANT: O'Connor, Timothy  
TITLE OF INVENTION: The Semaphorin Gene Family  
NUMBER OF SEQUENCES: 100  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP  
STREET: 268 Bush Street, Suite 3200  
CITY: San Francisco  
STATE: CA  
COUNTRY: USA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/121,713D  
FILING DATE: 13-SEP-1993  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Osman, Richard A.  
REGISTRATION NUMBER: 36,627  
REFERENCE/DOCKET NUMBER: B94-002-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415)343-4341  
TELEFAX: (415) 343-4342  
TELEX:  
INFORMATION FOR SEQ ID NO: 54:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 771 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-121-713D-54  
Query Match 18.1%; Score 654.5; DB 1; Length 771;  
Best Local Similarity 28.2%; Pred. No. 7.9e-57;  
Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps 27;  
32 RLLLLMAAASAGHLRSG-----PRIFAVMKGVHGGDRV-----FGTEPHVLFHEP 82  
6 RIVCLFWGVLLTARANYONGNNVPRKLKSLKEMLESNNVITFNGLANSSYHTFLDEE 65  
83 GSSVWVGGRGVYLPFPEEGKNA SVFTVNI GSTR-----GSCLDKDCDENTTLER 135  
66 RSLVLYGAKDHIISFDLVNFKDKOKIYWPYSTRDECKKAGADILK-EEANFLIKVYKA 123  
136 RSE-GLAAGCTNARHPSQWNLVNGTVVPLGEM-----RGYAPESPDENS 178  
124 YNQHLYACGAGAHPRIC-----TYIEIGHNPEDNIFKLENSHFENRGSKSPYDKLLT 177  
179 LVLFESGDEVSTIRKQEVNCKIIPFRFRIRGESELYT---SDTVNQNPQIKATIVHQ-DQ 234  
178 ASLLIDELVSGTAADEFMGDRFAIFRLGHHHPRTDQHSRWLNDPRFISAHLISESDN 237  
235 AYDDKIYFFREDNPKRNPAPLVNVRVAQLCRGDGESSLSYKNNTFKAMLVCSDA 294  
238 PEDDKVYFFREEMAIDEHSHKATHARIGQICKNDGFGHSL-VNKKTTTFLKARLICSVP 296  
295 ATN--KNFNRLQDVFLL--PDPSGQMRDTRFVYGVF--SNPMVYSAVCVYSLGDIDKVF 346  
297 GPNGIDTHFDLQDVFLLMNFDP-----KNPVYGVFTTSSNIFKGSANVCMSMSDVRVFE 352  
347 -----RTSSLKGYHSSLPNRPQKC-----LPDOQPIPTFTFQVADRHPEVAQR 390

RESULT 6  
US-08-835-268-54  
Sequence 54, Application US/08835268  
Patent No. 5807826  
GENERAL INFORMATION:  
APPLICANT: Goodman, Corey S.  
APPLICANT: Kolodkin, Alex L.  
APPLICANT: Mathes, David  
APPLICANT: Bentley, David R.  
APPLICANT: O'Connor, Timothy  
TITLE OF INVENTION: The Semaphorin Gene Family  
NUMBER OF SEQUENCES: 100  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP  
STREET: 268 Bush Street, Suite 3200  
CITY: San Francisco  
STATE: CA  
COUNTRY: USA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/835,268  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/121,713  
FILING DATE: 13-SEP-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Osman, Richard A.  
REGISTRATION NUMBER: 36,627  
REFERENCE/DOCKET NUMBER: B94-002-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415)343-4341  
TELEFAX: (415) 343-4342  
TELEX:  
INFORMATION FOR SEQ ID NO: 54:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 771 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-835-268-54  
Query Match 18.1%; Score 654.5; DB 1; Length 771;  
Best Local Similarity 28.2%; Pred. No. 7.9e-57;  
353 LGRVAHRDGPYQWVYQGRVYPRPGTCPSKTFGGFDSTKDLDPDVTITFAHSHPMYNP 412  
391 VERPKS-----PLKTLPLSHKYNHQAIVHRMQASHBETFRVILYLTDRGTINKVVE-PEEQ 445  
413 VFPMNRPVIRKTDV---NYQFTQIVDRVDEGQ-YDVMEIGDVGTVLKVSVIRKET 468  
446 EHSFAFNIM-ETIOPFRRAAIIOTMSLDAERKLYVSSOMEVSQVPLDCEVYGGGCHGL 504  
469 WYDLEEVILLEMTVFRREPTAISAMELSTKQQLYIGSTAGVAQPLHLHNCIDIGKACAECC 528  
505 MSRDYPCMDGRCISITV--SSERSVLOSINPAEPHKCPNPKPDK----APLQKVS-L-A 557  
529 LARDPYCAMDSACSRYEPTAKRRTRRQDIRGCDPLTSCDILHNDHNGHSPEERIIYGV 588  
558 PMSRYLLSCPMESRHATYSWRHKEVNEQSCERGHQSPNCI-----LFTENTLTAQOYGHF 612  
589 ENSSTFLCSPKSCQALVYVWQFORNREKEIRVDHIIIRTDGILLRSLOQKSGNYL 648  
613 CEAGSGSYFREAOHWQLLPEDGIMAEHL 640  
649 CHAVEHGFIOQLLKVTLL--EVIDTEHL 673

Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps 27;

```

Oy 32 RLLLLMAAASAGHLRSG---PRFAVMKGVHGDVND---FGQTEPHVLEHBP 82
Db 6 RIVCLFWGVLLTARANYQGNKNNVRLKLSYKEMLESNNVITFNGLANSSSYHTFLDDE 65
Oy 83 GSSSVWVGGRGVLYLDEPFGKNAASVRYVNIIGSTK-----GSCLDKDCENYITLLER 135
Db 66 -RSRIYVGAKHIFESFDLVNIRKIDPOKIWPVSYTRDECKMAGKDLK-ECANFIKVLKA 123
Oy 136 RSE-GLACGTNARHPSCMNLVNGTVPLGEM-----RGVAPFSPDENS 178
Db 124 YNOTILYACGTGAFHPIG-----TYIEIGHNPEDNIFKLENSHFEENGKSPYDKLLT 177
Oy 179 LVLFEQGVYSTRKQEVNGKIPRRRIIGSELYT---SDTVMNPQIKATIVHQ-DQ 234
Db 178 ASLIDGELYSTADFMGRDFAIFRTLGHHNPIRTEQDHSRWLNDPKFISAHLSSESN 237
Oy 235 AYDDKIYFFREDNDPKNEAPLNVSRVAOLCRDGGGESSLSVSKWNTFLKAMLVCSDA 294
Db 238 PEDDKVYFFERENALDGEHSGKATHARIGQICKNDGGRSL-VNKMVTFELARLLCSVP 296
Oy 295 ATN---KNFNRLQDVFL--PPSGQMDRTVYGV---SNPWNTSAVCVYSLGIDIKYF 346
Db 297 GPNGIDTFHDELQDVFLMNFKDP---KNPVYGVFTTSSNIFKGSAVCMYSMDVRYVF 352
Oy 347 -----RTSLKGYHSSLNPNRPGKC-----LPDQDPIPTETFGVADNRHPEVAOR 390
Db 353 LGRVYAHROGPVNYQWVRYGRRVYPRRGCTSPKTFGGFSDTKLPDDVITFAHSHPAMYR 412
Oy 391 VERPG---PLKTPLEHSHKYHOKAVAHMQASHGETFHVLYLTDRGTIHKVVE-PGBO 445
Db 413 VEPMNNRPVITKDV---NYQFTQIVDVEDAQO-XDVMFIGTDVGTVLKAVSIPKET 468
Oy 446 EHSFAFNIM-ELQPRRAAALQTMSLDAERKLYVSSQMEVSOVPLDCEVYGGGCHGL 504
Db 469 WYDLEEVLLLEMTVFEPTAISAMELSTQOOLYIGTAGVQLPHRCDIYKAKAEC 528
Oy 505 MSRDYCGMDQGRCSISY--SSERSVLOSINPAEPHKECPNPKPK---APLOKYSL-A 557
Db 529 LARDPYCAMDGSACSRYPTAKRRTRRODIRNGDPLTHCSDLHNDHGHSPERITIVY 588
Oy 558 PNSRYLSCPMESRHATYSWRHKEVNEQSCPEGHOSPNCI-----LFIENTLAQOYGHF 612
Db 589 ENSSTFLCSPKSQALVYVWQFORNEERKEELIRVDHIIIRTDGILLNSLQKDSGNVL 648
613 CEAGSGSTFREAOHWOLLEPDCIMAEHL 640
Db 649 CHAVEHGFIOPLLKYTL---EVIDTEHL 673

```

RESULT 7  
US-09-060-692-54  
Sequence 54, Application US/09060692  
Patent No. 5935865

GENERAL INFORMATION:  
APPLICANT: Goodman, Corey S.  
APPLICANT: Kolodkin, Alex L.  
APPLICANT: Matthes, David  
APPLICANT: Bentley, David R.  
APPLICANT: O'Connor, Timothy  
TITLE OF INVENTION: The Semaphorin Gene Family  
NUMBER OF SEQUENCES: 100  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP  
STREET: 268 Bush Street, Suite 3200  
CITY: San Francisco  
STATE: CA  
COUNTRY: USA  
ZIP: 94104

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

```

; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/060.692
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/121,713
; FILING DATE: 13-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Osman, Richard A.
; REGISTRATION NUMBER: 36,627
; REFERENCE/DOCKET NUMBER: B94-002-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 343-4341
; TELEFAX: (415) 343-4342
;
; TELEX:
;
; INFORMATION FOR SEQ ID NO: 54:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 771 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
;
; MOLECULE TYPE: protein
;
; US-09-060-692-54

```

Query Match 18.1%; Score 654.5; DB 2; Length 771;

Best local similarity 28.2%; Pred. No. 7.9e-57;

Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps 27;

```

Oy 32 RLLLLMAAASAGHLRSG---PRFAVMKGVHGDVND---FGQTEPHVLEHBP 82
Db 6 RIVCLFWGVLLTARANYQGNKNNVRLKLSYKEMLESNNVITFNGLANSSSYHTFLDDE 65
Oy 83 GSSSVWVGGRGVLYLDEPFGKNAASVRYVNIIGSTK-----GSCLDKDCENYITLLER 135
Db 66 -RSRIYVGAKHIFESFDLVNIRKIDPOKIWPVSYTRDECKMAGKDLK-ECANFIKVLKA 123
Oy 136 RSE-GLACGTNARHPSCMNLVNGTVPLGEM-----RGVAPFSPDENS 178
Db 124 YNOTILYACGTGAFHPIG-----TYIEIGHNPEDNIFKLENSHFEENGKSPYDKLLT 177
Oy 179 LVLFEQGVYSTRKQEVNGKIPRRRIIGSELYT---SDTVMNPQIKATIVHQ-DQ 234
Db 178 ASLIDGELYSTADFMGRDFAIFRTLGHHNPIRTEQDHSRWLNDPKFISAHLSSESN 237
Oy 235 AYDDKIYFFREDNDPKNEAPLNVSRVAOLCRDGGGESSLSVSKWNTFLKAMLVCSDA 294
Db 238 PEDDKVYFFERENALDGEHSGKATHARIGQICKNDGGRSL-VNKMVTFELARLLCSVP 296
Oy 295 ATN---KNFNRLQDVFL--PPSGQMDRTVYGV---SNPWNTSAVCVYSLGIDIKYF 346
Db 297 GPNGIDTFHDELQDVFLMNFKDP---KNPVYGVFTTSSNIFKGSAVCMYSMDVRYVF 352
Oy 347 -----RTSLKGYHSSLNPNRPGKC-----LPDQDPIPTETFGVADNRHPEVAOR 390
Db 353 LGRVYAHROGPVNYQWVRYGRRVYPRRGCTSPKTFGGFSDTKLPDDVITFAHSHPAMYR 412
Oy 391 VERPG---PLKTPLEHSHKYHOKAVAHMQASHGETFHVLYLTDRGTIHKVVE-PGBO 445
Db 413 VEPMNNRPVITKDV---NYQFTQIVDVEDAQO-XDVMFIGTDVGTVLKAVSIPKET 468
Oy 446 EHSFAFNIM-ELQPRRAAALQTMSLDAERKLYVSSQMEVSOVPLDCEVYGGGCHGL 504
Db 469 WYDLEEVLLLEMTVFEPTAISAMELSTQOOLYIGTAGVQLPHRCDIYKAKAEC 528
Oy 505 MSRDYCGMDQGRCSISY--SSERSVLOSINPAEPHKECPNPKPK---APLOKYSL-A 557
Db 529 LARDPYCAMDGSACSRYPTAKRRTRRODIRNGDPLTHCSDLHNDHGHSPERITIVY 588
Oy 558 PNSRYLSCPMESRHATYSWRHKEVNEQSCPEGHOSPNCI-----LFIENTLAQOYGHF 612
Db 589 ENSSTFLCSPKSQALVYVWQFORNEERKEELIRVDHIIIRTDGILLNSLQKDSGNVL 648

```

OY 613 CEAOEGSYFREAOHMLLPEDGICMAEHL 640  
Db 649 CHAVEHGFIOQLKVTL---EVIDTEHL 673

## RESULT 8

US-08-833-391-54  
Sequence 54, Application US/08833391  
Patent No. 6013781  
GENERAL INFORMATION:  
APPLICANT: Goodman, Corey S.  
APPLICANT: Kolodkin, Alex L.  
APPLICANT: Matthes, David  
APPLICANT: Bentley, David R.  
APPLICANT: O'Connor, Timothy  
TITLE OF INVENTION: The Semaphorin Gene Family  
NUMBER OF SEQUENCES: 100  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP  
STREET: 268 Bush Street, Suite 3200  
CITY: San Francisco  
STATE: CA  
COUNTRY: USA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/833.391  
FILING DATE:  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/121,713  
FILING DATE: 13-SEP-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Osman, Richard A.  
REGISTRATION NUMBER: 36,627  
REFERENCE/DOCKET NUMBER: B94-002-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415)343-4341  
TELEFAX: (415) 343-4342  
TELEX:  
INFORMATION FOR SEQ ID NO: 54:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 771 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-833-391-54

Very Match 18.1%; Score 654.5; DB 3; Length 771;  
Best Local Similarity 28.2%; Pred. No. 7.9e-57;  
Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps 27;

OY 32 RLILLMAAASAGHLRSG---PRIFAWKGVAGODRD---FCQTEPHVLEHEP 82  
Db 6 RIVCLFVGVLTLARANYQGNKNVPRILKLSYKEMLESNNVTTFNGLANSSSYHFLDEE 65  
OY 83 GSSVWVGGRKRVYLFPEPEKKNASVPTVNIQSTK-----GSCLDKRDENITLLER 135  
Db 66 -RSRLVYGADHIFSPDLVNIKFQKIWPVSYTRDECKWAGDILK-ECANFIKYLKA 123  
OY 136 RSE-GLLAGCTNARHPGQMNVLNCTVVPILGEM-----RGVAAPSPDEN 178  
Db 124 YNQHILYACGAGHPIC-----TYEIGHHPEDNIFKLENSHFENGKSPYDPKLLT 177  
OY 179 LVLEGEDEVSTIRKOEYNGKIPRRIRIGSELYT---SDTVANQNPQIFATIVHQ-DQ 234  
Db 178 ASLLIDELIVSGTAADMGRAFELFTLGHNNHPIRTIOHDSRWMLNDPKFIASHLISSDN 237  
OY 235 AYDDKIYFFREDNPKNPEAPLVNSRYAOLCRGDGGESSLVSKMNTFLKAMLVGSDA 294

Db 238 PEDDKVYFFFFRENALIDGESHGKATHIRIGQICKNDFGHRSL-VNKWTFLEARLICSP 296  
OY 295 ATN---KNPNRLDQVLELL--PDPSQWDRTRYGVF---SNPMNYSAYCVYSLGIDKVF 346  
Db 297 GPNGIDTFHDELQVLELNFKDP---KNPVYGVFTTSSNLEFGSAVCMSSMSVRRVF 352  
OY 347 -----RTSSLKGYHSSLPNPRGKC-----LPDQGPITFEFQVADRHPVAQR 390  
Db 353 LGPYAHRDGPNQWVPYGGRVYPRRGTCPSKTFEGGFSTKLPDQVITFARSHAMNPNP 412  
OY 391 VEPKG---PLKPLFHSKRYQKVAHBMQASHGETHVLVLTDRGTIRKVE-PEBQ 445  
Db 413 VFPNNRPIVKTQV---NYQFTQIVDVRYVADQO-YDVMEIGTVGVTLKVASIPKET 468  
OY 446 EHSFAFNIM-ETQPPRAAIIOTMSLADERRKLYSSOMESQVPLDCEVYGGCHCCL 504  
Db 469 WYDEEVLLEENTVREPTAISAMELSTKQQLYIGSTAGVAQQLFLHHCIDYIGKACAECC 528  
OY 505 MSRDYCGWDGRCISIV--SSERSVLOSINPAEPHKCCPNPKPDK---APLOKVSU-A 557  
Db 529 LARDPYCAMDSACSRYPTAKRRTRRODIRNGDPLTCSLDLHNDHGHSPERRIYGV 588  
OY 558 PMSRYLSCPMESRHATYSWKKEVNEOSCEPCHQSPNCI---LFTENLTAQYGHYF 612  
Db 589 ENSSTFLECSRSORALYVQFORNERKEIRVDHIIFTDQGLLRSLQOKSGNYL 648  
OY 613 CEAOEGSYFREAOHMLLPEDGICMAEHL 640  
Db 649 CHAVEHGFIOQLKVTL---EVIDTEHL 673

## RESULT 9

US-09-060-610-54  
Sequence 54, Application US/09060610  
Patent No. 634544  
GENERAL INFORMATION:  
APPLICANT: Goodman, Corey S.  
APPLICANT: Kolodkin, Alex L.  
APPLICANT: Matthes, David  
APPLICANT: Bentley, David R.  
APPLICANT: O'Connor, Timothy  
TITLE OF INVENTION: The Semaphorin Gene Family  
NUMBER OF SEQUENCES: 100  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP  
STREET: 268 Bush Street, Suite 3200  
CITY: San Francisco  
STATE: CA  
COUNTRY: USA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/060.610  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/835,268  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Osman, Richard A.  
REGISTRATION NUMBER: 36,627  
REFERENCE/DOCKET NUMBER: B94-002-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415)343-4341  
TELEFAX: (415) 343-4342  
TELEX:  
INFORMATION FOR SEQ ID NO: 54:  
SEQUENCE CHARACTERISTICS:

Very Match 18.1%; Score 654.5; DB 3; Length 771;  
Best Local Similarity 28.2%; Pred. No. 7.9e-57;  
Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps 27;



OY 613 CEAQSGSYFREAQWQLLPEQGMAEHL 640  
 DB 649 CHAVEHGTQTLTKVTL---EVIDTEHL 673

## RESULT 11

US-09-308-179B-1

Sequence 1, Application US/09308179B  
 Patent No. 6436669  
 GENERAL INFORMATION:  
 APPLICANT: INAGAKI, Shinobu  
 APPLICANT: FURUYAMA, Tatsuo  
 TITLE OF INVENTION: NOVEL SEMAPHORIN GENES (I)  
 FILE REFERENCE: 0020-4562P  
 CURRENT APPLICATION NUMBER: US/09/308,179B  
 CURRENT FILING DATE: 1999-05-14  
 PRIOR APPLICATION NUMBER: PCT/JP97/04111  
 PRIOR FILING DATE: 1997-11-12  
 PRIOR APPLICATION NUMBER: JAPAN 321068/1996  
 PRIOR FILING DATE: 1996-11-15  
 NUMBER OF SEQ ID NOS: 4  
 SOFTWARE: PatentIn Ver. 2.1  
 SEQ ID NO 1  
 LENGTH: 775  
 TYPE: prt  
 ORGANISM: Mus sp.  
 US-09-308-179B-1

Query Match 15.7%; Score 566; DB 4; Length 775;  
 Best Local Similarity 28.4%; Pred. No. 6, 9e-48;

Matches 194; Conservative 111; Mismatches 254; Indels 124; Gaps 33;

OY 33 LLLLLMAAASAOGLH-----RSGPRLEAVAKGVQDQVDFGQT-----EPHT 76  
 DB 8 LLLLLM-----GHLELMTPGHSANPSYPRRLSHKELLEINRISIFQSPGLDLHT 60  
 OY 77 VLEHPEGSSVWVGKGRKYLLDFEPGKNASVTVNIGST-----KGSCLDRDCE 127  
 DB 61 MLTDE-YOERLEVGGRDLVLSLNL-ERVSDGYREIYWPSTAVKVERCIMGK--DAMECA 116  
 OY 128 NYITTLERSE-GLACGTNARHPSQWNLVNG--TVVPLGEM-----RGYAPSPDE 176  
 DB 117 NTVRLVHNHNRHLTLCAFGADPHCAFTRVGHNSERPLFHLESHSSEKRGRCPPDPS 176  
 OY 177 NSLVLEPGDEVYSTIRKQEVNCKIPRR-----RIGSESELYTSDTVQNPQIFAKTV 230  
 DB 177 SFVSTLVGNELFAGLYSDWGRDSALFRSMGKLGHIRTE--HIDRRLKEPKFVGSYMI 233  
 OY 231 HODQAVDD-KIYFFREDPDKNPEAPLVNSRYAOLCRDQGESLSLSSKNNTFIKAML 289  
 DB 234 PDNEBDKMKYFFTEKALEENNAHTIYTRVGRCLVNDMGQRIL-VNKNSTFLKARL 292  
 OY 290 VCSDATN---KNFNRLQOVFLP--DPSGWRDTRVYGVF--SNPMYSAVCVYSLD 341  
 DB 293 VCSVSGMGNIDYFDELEEVFLPTDRP---KNYIFELFTTSSIFGSHAVCYVHMS 348  
 OY 342 IDKVR--TSSLKG--YHSSL-----PNRPGKCLP-----DQPIPTETFOVADR 384  
 DB 349 IREAFNGPRAHKEGPEYHMSLEGGKPYRPRGSCASKVNGKYGTITKDPDAIRFARMH 408  
 OY 385 PEVAORVERPMGLKTRPLF--HSKYHYQKVAVHRMQASGEGFPHVLYLTDDGTIHKVYE 441  
 DB 409 PLMYPRPIKIVH--KRPILVKTGDKYNLRQLAVDRVAEDGQ--YDVLFTGTDGIVLYKVT 465  
 OY 442 PGEQHSFAFNIM--EIOFFRRAAIIQWMSLDAERKILVSSQWESQVPLDLCEVYGGG 499  
 DB 466 IYNQETEMHEEYILELOQIFKDPAPILISMESKROQLIGASAVAOVRFHHCMDYGA 525  
 OY 500 CHGCLMSRDPYCGWDQRCISLY-----SSERSVLOSINPAEPHKECPNPK--PKAPLQ 552  
 DB 526 CADCLARPYCAMPDGISCSRYRYPTGAHAKRRFRDQVHNGMAOQCFOQGVGADLDR 585  
 OY 553 KVSILA---PNSRYLTLSCPRSHRATYSW-----RHKENVQ-----SCFQGHOSPNCI 597

DB 586 EERLAAGIESNSTLLECTPRSLQAKYIWFYQKGRDVRKEEVKTDDBRVKMDLG-----L 639  
 OY 598 LFIENLTAQOYGHYFCEAGSGY 620  
 DB 640 LFL-KVRKSDAGTYFCQYVEHNF 661

## RESULT 12

US-08-136-922-2

Sequence 2, Application US/08136922  
 Patent No. 5416197  
 GENERAL INFORMATION:  
 APPLICANT: Raper, Jonathan A.  
 APPLICANT: Luo, Yuling  
 TITLE OF INVENTION: Compositions which Regulate Neural  
 TITLE OF INVENTION: Regeneration and Methods of Making and Using the Same  
 NUMBER OF SEQUENCES: 2  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &  
 ADDRESSEE: No. 5416197is  
 STREET: One Liberty Place  
 CITY: Philadelphia  
 STATE: PA  
 COUNTRY: USA  
 ZIP: 19103  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/136,922  
 FILING DATE:  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Deluca, Mark  
 REGISTRATION NUMBER: 33,229  
 REFERENCE/DOCKET NUMBER: UPN-1428  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 215-568-3100  
 TELEFAX: 215-568-3439  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 477 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-136-922-2

Query Match 15.0%; Score 543; DB 1; Length 477;

Best Local Similarity 31.2%; Pred. No. 6, 3e-46;  
 Matches 144; Conservative 74; Mismatches 187; Indels 56; Gaps 17;

OY 230 VHDQAVDDKIYFFREDPDKNPEAPLVNSRYAOLCRDQGESLSLSSKNNTFIKAML 289  
 DB 1 LEHNDPEDDKYFFFERENALDEHSGKATNARIGQICKNDGFGHSL-VNKNSTFLKARL 59  
 OY 290 VCSDATN---KNFNRLQOVFLP--DPSGWRDTRVYGVF--SNPMYSAVCVYSLD 341  
 DB 60 TCSVSGMGNIDYFDELEOVFLMNRKDP---KNPVYGVFTTSSIFGSAVCYKMSMD 115  
 OY 342 IDKVF-----RTSSLKGYSLLPNRPGK-----LPDQPIPTETFOVADR 385  
 DB 116 VARVFLGPAVHRDPRYQWVRPQGRVYRPRGSCPSKTFGFGFDSYKDLDPDVIYTFARSH 175  
 OY 386 EVAQRYEPNG---PLKTLFHSKYHYQKVAVHRMQASGEGFPHVLYLTDDGTIHKVYE 441  
 DB 176 AMYNPVEFPMNRPVYIKTDV---NYQFTQIIVDRAVDAEDGQ--YDWFITGTDGIVLYKVS 231  
 OY 442 -PGEQHSFAFNIM--EIOFFRRAAIIQWMSLDAERKILVSSQWESQVPLDLCEVYGGG 499  
 DB 232 IKETWYDLEEVLEEMTYFREPTAISAMELSTKQOQLYIGTAGVAQLPLHRCDIYGA 291





